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REMARKS/ARGUMENTS

Upon entry of the instant amendment, claims 1-12 are pending. Claim 1 has been amended. Claims 13-24 have been previously withdrawn. Based upon the remarks below, the Examiner is respectfully requested to reconsider and withdraw the rejection of these claims.

CLAIM REJECTIONS - 35 U.S.C. § 103

Claims 1 and 2 have again been rejected under 35 U.S.C. § 103(a) as being unpatentable over Brighton et al, U.S. Patent No. 5,132,775 ("Brighton") in view of Rhodes et al, U.S. Patent No. 4,536,951 ("Rhodes") and Wolf, "Silicon Processing for the VLSI Era", Vol. 2, Process Integration ("Wolf").

It is again respectfully submitted that the Examiner has failed set forth a *prima facie* case of obviousness for this rejection and the rejections of claims 3-12 in which the Examiner combines from 3 to 5 references to support the rejections. In particular, in order to establish a *prima facie* case of obviousness, three criteria must be met as set forth in MPEP § 2143.

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination reasonable expectation of success must both be found in the prior art, not in the Applicant's disclosure."

In response to the Applicant's last response, the Examiner opines in Paragraph 11 of the Detailed Action that Applicant is arguing elements not recited in the claim. In particular, Paragraph 11 of the Detailed Action states:

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"Also, Applicant argues,...claim 1 recites that the pillars or vias are formed from a photoresist that is plated..." In response to this argument, claim 1 does not recite plating the photoresist."

However, the claims did in fact recite that the photoresist is plated. In particular, elements (e) and (f) of Claim 1 (before the current amendment) are repeated below.

(e) forming at least one pair of spaced apart vias from a photoresist on said lower metal layer;

(f) plating said vias formed from photoresist defining at least one pair of plated pillars having top surfaces;

These elements clearly recite that the via or pillar is formed from photoresist and that the pillar is plated.. However, in order to make it clearer, elements (e) and (f) of claim 1 are currently being amended as follows:

(e) forming at least one pair of spaced apart vias from a photoresist defining pillars on said lower metal layer;

(f) plating said pillars ~~vias formed from photoresist~~ defining at least one pair of plated pillars having top surfaces;

As mentioned in response to the last Official Action, none of the references recite plated photoresist pillars. As such, it is respectfully submitted that the Examiner has failed to set forth a prima facie case of obviousness for this reason alone. In addition, the Applicant's arguments regarding the Examiner's failure to provide a suggestion or motivation to combine the references from the previous Office Action response are hereby incorporated by reference.

Claim 3 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Lee US Patent No.6,800,928. As mentioned above, the Brighton, Rhodes and Wolf references do not disclose plated pillars formed from photoresist. The Lee patent likewise does not disclose plated photoresist pillars. For these reasons and the reasons above, it is respectfully submitted that the Examiner has failed to

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set forth a prima facie case of obviousness. The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claims 4 and 5 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Lin US Patent No. 5,929,525 ("Lin"). Claim 6 has been rejected as been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf and Lin references further in view of Tsai US Patent No. 5,252,515 ("Tsai"). Claims 7 and 8 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Hendricks et al US Patent No. 6,153,525 ("Hendricks"). Claim 9 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf references and Hendricks references further in view of the Applicant's Admitted Prior Art. Claims 10 and 11 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Furukawa et al US Patent No. 6,387,783 ("Furukawa"). Finally, claim 12 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf and Furukawa references and further in view of Samoto US Patent No. 5,583,063 ("Samoto").

In order to keep this response as brief as possible, the rejection of claims 4-12 is addressed collectively below. First, these claims 4-12 are all dependent on claim 1. First of all, the arguments set forth above with respect to claim 1 are incorporated by reference. The Brighton, Rhodes and Wolf references were discussed above. None of the other references recited in support of the rejection of claims 4-12 disclose or suggest a process for forming the plated photoresist pillars as recited in claim 1. As clearly set forth in MPEP § 2143, in order to make out a prima facie case of obviousness the references must disclose all of the claim limitations. Indeed, none of the references disclose a method for forming plated photoresist pillars, as recited in the claims at issue. As such, it is respectfully submitted that the Examiner

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has failed to set forth a *prima facie* case of obviousness as required by MPEP § 2143 for this reason alone.

Moreover, it is respectfully submitted that the Examiner is combining 4 and 5 references to support these rejections. It is respectfully submitted that the Examiner has failed to show that the suggestion to combine the references is within the references themselves. Without such a showing, it is respectfully submitted that the Examiner is impermissibly combining the references using the claims as a blueprint. For these reasons and all of the above reasons and the reasons submitted in the previous Office Action response, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 4-12.

Respectfully submitted,

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